

American Embassy
P.O. Box 9123
686 Old Bagamoyo Road
Dar es Salaam

March 25, 2015

For: All Prospective Vendors

Re: REQUEST FOR QUOTATION for **PR4207435 - SERVICE & MAINTENANCE** of NEC (New Embassy Compound) electrical Switchgear

The US Embassy in Dar es Salaam invites you to submit your quotation for the services shown below.

I. GENERAL INFORMATION:

The United States Embassy in Dar es Salaam requires professional services and contractor cost proposals to perform preventive maintenance services on the facility's Electrical Switchgear.

II. PROJECT REQUIREMENTS:

DESCRIPTION OF EQUIPMENT *:

**Please see attachment at the end of this sheet for more details*

- 1) Main switchgear-415 Volts 3phase+N 50Hz indoor Switchgear, GE – AKD 10 switchgear
- 2) Double ended switchgear-415 Volts 3phase+N 50Hz indoor Switchgear, GE – AKD 10 switchgear
- 3) Automatic Transfer Switch 3000A/3P – Zenith – 2each

III. GENERAL REQUIREMENTS:

The Contractor under this SOW will be responsible for labor, tools, and materials required to carry out all preventive maintenance as outlined in this SOW. Embassy staff has service manuals for all Electrical Switchgear on site.

IV. SCOPE OF WORK - - ELECTRICAL SWITCHGEAR PREVENTIVE MAINTENANCE

Contractor shall provide all materials, supervision, labor, tools and equipment to perform preventive maintenance. This must include, but not limited to, batteries for the trip units, fuses, and dielectric lubricant.

All personnel working in the vicinity shall wear and /or use safety protection while all work is performed. Strict adherence to NFPA70-E and applicable OSHA standards must be maintained at all times. Regular safety meetings shall be held among on-site contractor personnel, LES staff assisting. Any questions or injuries **shall** be brought to the attention of the Post Occupation Safety and Health Officer (POSHO). Material Safety Data Sheets (MSDS) shall be provided by the Contractor for all HAZMAT materials. Copies will be provided to the COR for approval.

Prior to beginning any site work the contractor must submit to the embassy FM an isolation Standard Operating Procedure (SOP) and schedule to reflect the planned work and sequence. The contractor must obtain written approval from the embassy Facility Manager noting the planned servicing schedule, and all required generator transfers, tie-breaker switching, or switchgear outages.

If any discrepancies are found with the generator system that are not covered under this scope of work then the contractor must provide the following:

1. Detailed report noting the discrepancy found.
2. Bill of Materials (BOM) to include component name, quantity, part #, and price for any repair material required and material lead time.
3. Price quote for repair labor.

At a minimum, the following work must be done:

Task Description

A. Step-One, Visual Inspection:

- 1) Visual and Mechanical Inspection to insure the proper operation of all factory and vender installed meters, breakers, remote power monitoring equipment associated with the switch gear.
- 2) Inspect physical, electrical, and mechanical condition including evidence of moisture or corona.
- 3) Inspect that all filters are in place, and the vents are clear.

- 4) Inspect that the working space is maintained in front of all the electrical gear per the National Electrical Code (NEC) requirements.
- 5) Inspect that the electrical room is free from foreign articles not associated with the room.

B. Step-Two, Verify:

- 1) Compare the installed metering measurements with voltage and power readings from a True RMS meter. Make calibration corrections as necessary to ensure accurate voltage and power readings.
- 2) Verify the switchgear circuit breakers sizing match the drawings.
- 3) Verify the proper labeling of all the breakers in the switchgear.
- 4) Verify that the Post as-build drawings (electrical one-line) match the switchgear distribution. Make "Red Ink" corrections on a paper copy as necessary. Inform the FM of any discrepancies or changes to the drawings.
- 5) Verify that the required NFPA70-E safety equipment is available and in good condition for local staff to use.
- 6) Refer to the manufactures recommendations for additional maintenance requirements.

C. Step-Three, Test/Clean/Correct:

- 1) Inspect anchorage, alignment, grounding for the equipment.
- 2) Test the system earth ground (25 ohms or less).
- 3) Perform infrared testing on all conductor connections, buss terminations. Only record hot spots on digital format for review.
- 4) Before shutdown insure that all components are operational. Record ones that are not at this time. Make the FM aware of all components that are not functioning prior to shut down.
- 5) Schedule power outage of equipment for cleaning. Coordinate any required outage with post. (Outage may require off hours work).
- 6) As applicable perform function tests on "rack-out" breakers, test trip units and settings. Replace any faulty battery, fuse, or switch.

- 7) Perform proper Lock-out/Tag-out and ensure the system is de-energized before removing panel covers and exposing any electrical bus or cabling. Under no circumstances should the equipment be energized during the maintenance operation.
- 8) Clean each compartment. Check for damage, excessive wear, or corrosion
- 9) Spot check and correct any loose components or connections.
- 10) Torque loose connections identified during the infrared test or during inspection.
- 11) Confirm correct operation and sequencing of electrical and mechanical interlock systems.
- 12) Use appropriate dielectric lubrication on moving current-carrying parts and on moving and sliding surfaces.
- 13) Correct any faulty, damaged, discolored, and worn components using site spares.
- 14) Exercise all active components. This includes racking the breakers out than back in.
- 15) Inspect mechanical indicating devices for correct operation.
- 16) Inspect all power control transformers for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, proper overload protection, and over all general wiring.
- 17) After re-energizing the equipment ensure that all components are up and functioning properly.
- 18) Refer to the manufactures suggested recommendations for additional maintenance requirements.
- 19) Clean or replace any air filters present.
- 20) Make calibration corrections as necessary to ensure accurate voltage and power readings on permanently installed switchgear metering.

Equipment List:

Equipment	Manufacturer	Make	Specifications	Location
Main Switchgear-SWG 1	GE	AKD 10	3x 3200 breakers	Utility Building
3200Amps with Wave Pro			1x 800 breaker	
Low voltage Power				
Circuit Breakers				
Double ended Switchgear-SWG2	GE	AKD 10	4x3200 breakers	Utility Building
3200Amps with Wave Pro			14x 800 breakers	
Low voltage Power			1x1600 breaker	
Circuit Breakers				
Automatic Transfer Switch	Zenith	ZTSL 300EC-93	3000Amps; 3pole	Utility Building
Quantity - 2each				

Your quotation must be submitted by **1700 hours local time on Wednesday, April 08, 2015.**

If a site visit is required, please make an appointment to MgattaSE@state.gov so that we can arrange access to the facilities.

The US Government intends to purchase the lowest priced technically acceptable service.

All vendors receiving awards over \$25,000 must be registered in the system for Award Management (SAM). When submitting your bids, write your SAM registration information directly and clearly on your quotation.

We encourage all vendors which may bid either on this solicitation or in the future to start now and complete the SAM registration process. Registration will make the award process move much more smoothly and quickly. The registration process is not difficult, provided all instructions are followed carefully. Please see our Embassy Contract opportunities web page for details.

We encourage electronic submission to darprocurementbid@state.gov.

On the e-mail subject line, note for PR4207435 - SERVICE & MAINTENANCE of NEC electrical Switchgear

You may also deliver your information to the Embassy at gate no 3. Mark your envelope as **'SERVICE & MAINTENANCE of NEC electrical Switchgear'** and send to:

Contracting Officer
P.O. Box 9123, 686 Old Bagamoyo Road
Dar es Salaam

Looking forward to receiving your quotation.

Susan Phemister
Contracting Officer